CITY OF THORNTON

Forestry and Gardens

Correct Mulching Applications

Mulches are a protective layer of material placed on the soil surface to retain moisture, improve soil conditions, retard weed growth, and insulate against extreme temperatures. Placing mulch around newly planted trees is beneficial and gives young trees the protection they need to get started. Do not smother your tree, more is not better when it comes to mulching.

Benefits of Mulching

- * As an organic mulch breaks down it adds nutrients to the soil increasing fertility, and prevents soil compaction from rain.
- * A layer of mulch prevents evaporation and maintains soil moisture.
- Mulch can inhibit certain plant diseases by protecting roots.
- * A ring of mulch around a tree about 3-4 feet in diameter creates a border and protects it from mower and trimmer damage.
- * 2-4 inches of mulch controls weeds and prevents grass encroachment.

Over Mulching Problems

Too much will prevent oxygen exchange and create anoxic conditions that are toxic to trees and plants. The

reduced air flow can encourage the growth of fungus and molds.

Do not pile mulch up around the trunks of trees. This is called a "mulch volcano" which causes trunk decay and provides habitat for destructive insects and animals. Wider is better than deeper.

Over mulching can create a moisture barrier, not allowing water in or out, encouraging either overly moist or dry conditions.



If you want to refresh your mulch every year for aesthetic purposes, do not pile new mulch on top of old. Remove the previous years mulch, leaving behind what has begun to decompose, and apply a thin layer of new mulch.

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Types of Mulch

There are several factors to consider when choosing the appropriate mulch to use. Here are some pros and cons of the different types available.

Inorganic

Stones and Gravel- are a relatively permanent option that is often used for xeric gardening. They are less susceptible to wind and rain erosion and retain moisture, while allowing the soil to breathe. They work very well with xeric plants that need proper drainage, although they can reflect heat on to the house. Use them where light reflection will not be a problem, and choose plants that can take the heat. They come in a variety of sizes, colors, and textures. Consider whether certain areas will be used for heavy traffic, small crusher stones are good for pathways, while larger stones are appropriate for beds and borders. Inorganic mulch is not highly recommended for most trees as it does not add any nutrients to the soil, and the light reflection can cause sun scald.

Organic

There are many types of organic mulches to choose from. They can range from yard waste and straw to chipped wood. Organic mulches decompose over time adding nutrients to the soil, but are not permanent. They can smother plants and trees if too deep. When applied appropriately they retain moisture and block many weeds. A ring of organic mulch is highly recommended for trees.

Here is a list of the many organic mulches available:

Wood Chips— available in a variety of colors and textures at many retail stores. Decomposes quickly adding nutrients to the soil, if applied too deep can smother plants and trees. Artificially dyed mulches are not recommended as the color looks unnatural and fades over time.

Pine Bark- slow to decompose and comes in a variety of sizes. It can lower the ph of soil slightly.

Municipal Tree Trimmings— wood chips created by the city or county from tree and shrub removal. Use in areas around property borders as it can be ununiformed. Not as attractive as other mulches. But hey, its free! Check with your local government for availability and pick up sites.

Yard Waste— Leaves, grass clippings, and pine needles. Free and adds nutrients to the soil, great for vegetable gardens. Make sure the grass is seedless, and cut up leaves so they do not clump or blow away.

Straw- sterile hay is popular in vegetable gardens as it can be tilled into the soil after harvest.